IDENTIFICATION OF CRITICAL ROLES OF PROGRAM MANAGERS AND CONTRACTING OFFICERS

THESIS

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Daniel R. Shingledecker

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Abstract

The purpose of this research was to identify current disagreement among acquisition professionals in regards to their role and authority; and to identify benefits and risks associated with combining program management and contracting officer roles into a single position. The research questions were answered through a literature review and use of the Delphi technique. The literature review indicated that the Department of Defense has been operating with multiple conflicting perceptions of authority among its key acquisition professionals. The literature also identified the need for complex organizations, such as Department of Defense acquisition offices, to pair high levels of responsibility with equally high levels of authority. Ten program manager and contracting experts, representing the Air Force and industry, participated in four cycles of the Delphi technique. The research identified critical overlaps in perceptions of the roles and authority between a program manager and a contracting officer. The program manager was noted as having a lack of sufficient authority to guide the program. The contracting officer's roles were noted as shifting towards that of a business advisor. The culmination of this research effort was a discussion and presentation of recommendations for the future of the relationship.

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I. Introduction

General Issues

The program manager and contracting officer, in Department of Defense (DoD) acquisitions, have been having difficulties in clearly identifying their practical roles and responsibilities. This difficulty has been persistent and pronounced since the formal introduction of the program manager role in acquisitions, over 25 years ago. The professional relationship between a program manager and a contracting officer, as it is understood today, has only existed since 1976. This was when the program manager position was formalized by combining three pre-existing Air Force Specialty Codes (AFSC) into one. The contracting officer and the program manager hold vital positions in acquiring a variety of goods, services, and weapon systems for the DoD.

Despite the relative importance of the two positions today, they have each evolved extensively from their debut in the acquisition process. The traditional authority vested in the contracting officer was primarily of a legal nature. Their duties were to represent the government as an agent of contract authority. The program manager is also an agent of the government in regards to acquisitions. A position was required to incorporate the technical, legal and other programmatic aspects because defense acquisitions had become so complex. The need for that position is what spawned the creation of the program manager.

Both the contracting officer and the program manager are considered agents of the government. Together they have the responsibility and authority to execute the contracting actions required to deliver products to the DoD. The program manager has wide authority to direct resources to meet the program objectives. The program manager must integrate the efforts of many functional services in order to meet those objectives. One of those functional services is contracting. The relationship between a program manager and a contracting officer is especially important and unique in comparison to the other functionals responsible to the program manager. It is relatively more important because the contract, which both parties work to create, is the formal document that legally represents the program.

The relationship between a program manager and contracting officer can be described as one of check and balance, partnership, and even conflict. These three descriptions work in concert with each other to facilitate government acquisition. Recent reports, however, have alluded to the conflict and the check and balance factors as a hindrance to the process (Denault, 2000; 22). Specific obstacles that contribute to the process breakdown are blurred contract authority, matrixed organizations, personality, and a lack of co-location. This research focuses on the conflict created due to the blurred contract authority obstacle.

Problem Statement

Each of the two positions has a set of responsibilities to execute for the program. Along with those responsibilities, they are given the authority to perform them. The problem lies with the overlap of authority and responsibility between the two positions. This confusion creates a problem between the agents themselves as well as between the

agents and their industry partners. As program managers and contracting officers continue to struggle in defining their practical authority roles, conflicting messages can be sent to contractors. Although explicitly noted that contract direction shall come only from a contracting officer, contractors continue to place great stock/value in the more close and personal relationship that they develop with the program manager. Often program managers are seen by their industry counterparts as trusted partners, while the contracting officer is viewed as negotiation adversaries. This problem can be compounded further if the program manager and contracting officer are at odds and it becomes apparent to the contractor.

The contradicting and overlapping roles of the program manager and contracting officer can provide effective checks and balances to ensure the DoD is not improperly obligated. The benefit, however, may come at a cost. It adds burdensome levels of bureaucracy and oversight with a large potential for inefficiencies. The Packard Commission report concluded that:

> [T]here is legitimate cause for dissatisfaction with the process by which the Department of Defense and Congress buy military equipment and material... The truly costly problems are those of complicated organization and rigid procedure, not avarice or connivance. Chances for meaningful improvement will not come from more regulation but only with major institutional change. (Packard, 1986: 15)

The spirit of this study is reflective of the Packard Commission findings. The guidance that was proposed was one that encouraged probes into innovative ideas to reform acquisition that may have seemed impossible at first. One of the many possible solutions in reducing the authority conflict is to combine the roles. This study is an investigation of the potential good and bad consequences of combining the roles of a program manager and a contracting officer.

Research Objectives

In developing this study, the researcher expected to create a forum for discussion in which sufficient input would be generated from the participants. To best accomplish this, the following areas were addressed:

1. Clearly identify the practical roles and responsibilities of a program manager
2. Clearly identify the practical roles and responsibilities of a contracting officer
3. Identify any overlap in their roles responsibilities
4. Identify/discuss the consequences of combining the roles into one position

The researcher looked at the difference in the potential benefits and risks of making the program manager or the contracting officer the sole program and contract authority figure in a program. More specifically, this study asked acquisition experts what the practical roles of a program manager and a contracting officer are in today's environment and if any overlap in those roles exists. If overlap was to be found, it was the researcher's goal to identify the problems that arise from the overlap. If enough overlap was found to exist, the next issue that seemed appropriate was whether or not to combine the positions. The consequences of combing the two positions are what is of most interest to the researcher and hopefully, to potential decision makers.

Scope

This research was limited to the investigation of authority relationships of contracting officers and program managers within the Air Force. This study incorporated comments from panel inputs provided by government and industry acquisition professionals. For the purposes of this study and due to the structure of the methodology, only a small panel, consisting of ten experts, was required.

No analysis was made of the wide variety of specific systems or sub-systems that panel members had experience with. The major focus, rather, was to address authority relationship issues existing in today's environment. This study may then prove as a useful tool to demonstrate the progress program managers and contracting officers have or have not made since they began working together a quarter century ago. Additionally, it may suggest the areas for future study to improve the DoD acquisition process.

Thesis Overview

This chapter introduced the notion that overlapping roles between program managers and contracting officers may be as harmful as they are beneficial to the administration of DoD programs.

The next chapter provides a development of the argument that the current authority relationships could be altered in order to improve acquisition efficiency. Chapter II provides a history of the program manager and contracting officer authority and the roles they play in DoD acquisitions. Consequences of any overlap are addressed based primarily on a study performed by the United States Navy's Naval Sea System Command (NAVSEA) in 1983. Chapter III discusses the methodology used to gather

expert opinion of the program manager and the contracting officer relationship. The methodology used allowed expert panel members to communicate frank and honest opinions in an anonymous forum. Chapter IV provides the data and research findings. Chapter V discusses the research summary, research conclusions, study limitations and recommendations for further study.

II. Literature Review

Overview

The following is a review of the literature pertinent to the research objectives oulined in Chapter I. This review examines the history and complexity of program managers and contracting officers in the DoD. Department of Defense reports, specifically addressing the conflict among program managers and contracting officers, were also reviewed. Finally, a concentrated investigation on authority literature is presented.

Background

The current process in which the United States operates its acquisitions, has evolved tremendously from its infancy. Acquisitions made to support the military have been said to be vitally important to the growth of America's industrial base (Smith, 1985: 4). Military contracts have long been a source for producing some of our nation's greatest products. Items such as mechanized production, computers, sonar, radar, jet-engines, swept-wing aircraft, insecticides, transistors, fire and weather-resistant clothing, antibacterial drugs, numerically controlled machine tools, high-speed integrated circuits, and nuclear power were noted by Nagle as contributions made via military research and development and contracting since World War II (Nagle, 1992: 2).

The United States government's first contracting agreements were far from what we consider reasonable today. Beginning in the late 18th century, authority to equip the military was granted carte blanche to contractors. This broad authority allowed them to

determine everything from the quality to the quantity of items to be delivered (Nagle,1992: 13). Detailed government specifications and regulations played no part in getting the job done. It is interesting to note: at some point in the United States' history they moved from a strategy of buying whatever industry could provide to providing detailed requirements and money to industry to develop and build weapons that otherwise may not have ever existed.

Our nation was a nation of war from the very beginning. The Declaration of Independence bound the original 13 States together against Great Britain. Although the independent States were at odds trying to preserve their individual state's rights, they knew their further existence depended upon uniting for defense. The success of the army was at such a high priority that Congress was quick to institute sound and efficient ways to equip it (Nagle,1992: 21). The authority to enter into contracts; however, was not and is still not expressly granted by the Constitution. The authority to enter into contracts, rather, is inherent in our government's sovereignty. In 1831, The Supreme Court ruled in United States v. Tingey that:

> ...the United States, being a body politic may within the sphere of constitutional powers confided to it, and through the instrumentality of the proper department to which those powers are confided, enter into contracts not prohibited by law and appropriate to the just exercise of those powers. (Evans et al, 1968: 17)

The Second Congress passed the first law regulating federal procurement in 1792. It stated that purchases made to support the Army had to be done through the Department of the Treasury (U.S. House, 1972:164). Article 1, Section 9 of the Constitution states that: "No money shall be drawn from the Treasury, but in consequence of appropriations made by law." Although the executive branch does not get its authority from Congress to

enter into contracts, it is bounded by Congress's intent in the form of laws. Military Service Secretaries are empowered by Congress to delegate their authority to enter into and administer contracts (Evans, 1968: 22). That delegation currently flows to contracting officers.

The Contracting Officer and Program Manager Today

The authority, granted solely to contracting officers, to obligate the government is found in the Federal Acquisition Regulation (FAR). FAR part 1.601 states "contracts may be entered into and signed on behalf of the Government *only by* contracting officers" (emphasis added). Before obligating the government, FAR 1.602-1 states the contracting officer is responsible for ensuring all requirements of law, executive orders, regulations, and all other applicable procedures, including clearances and approvals have been met.

The contracting officer has other responsibilities and they are:

> ...ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships. In order to perform these responsibilities, contracting officers should be allowed wide latitude to exercise business judgment. (FAR 1.602-2)

The program manager, although responsible for the program, does not possess the same authority that a contracting officer does. The FAR does little to address the role of a program manager in the acquisition process. Alternatively, DoD Directive 5000.1 and DoD Instruction 5000-2 guide the program manager. The program manager is responsible for fulfilling acquisition requirements but has no direct authority to obligate the government.

William Thybony captures the duties of the program manager well in this excerpt:

> A program manager is an acquisition official directly and continuously charged with coordinating and managing all phases of a single acquisition program. The program manager intensively integrates diverse functional activities on a timely and systematic basis to achieve a coordinated concentration of resources on the objectives of a specified broad task. (Thybony, 1987:70)

Conflict/Dilemma

It has been established that the contracting officer has the authority, delegated down from Service Secretaries, to enter into contracts on behalf of the government, and that the program manager has the authority and responsibility to manage all aspects of the acquisition process. The responsibilities of the two positions meet where contract execution and overall program execution intersect. The contract contains the formal aspects of the acquisition of which the contracting officer is responsible. The program manager is responsible for program success and in that, includes contract execution. Inherent in this relationship is a potential for conflict. A report produced for the Commander of the United States Navy's Naval Sea System Command (NAVSEA) in 1983, attempted to identify the current state of affairs between a program manager and a contracting officer (Sherman, 1987:82). The overall result from the study implied that the conflict between a program manager and a contracting officer was manifested in several different areas. Those areas were: establishing contract requirements, adherence to regulations and other legal requirements, and blurred authority/program influence.

Establishing Contract Requirements

This issue touches upon both the education and communication skills of the program manager and the contracting officer. In the NAVSEA report, the comments specific to this issue were:

> The program manager does not inform me of his plans nor include me in meetings in which contractual requirements are established. (1987:82)
>
> The contracting officer is not well enough informed on the technology involved in the acquisition. He doesn't understand the ball game. (1987:82)

The notion implied from the statements above is that the program manager does not provide information to the contracting officer because the contracting officer does not have the ability to understand it. It is unclear, however, from these statements if the problem arises from personal conflicts or from a ligitimate lack of technical expertise on the contracting officer's behalf.

Although the report was done in 1983, over 17 years ago, the issues remain germane. Defense industry managers reported that the acquisition corps is hampered by the lack of its professional capabilities (Fox, 1994; 66). The education and experience is not as sound as it tends to be in industry environments. Education of the acquisition career fields, especially contracting, is currently a major priority within the DoD.

Adherence to Regulations and Other Legal Requirements

The program manager and contracting officer are involved in a range of dollar and technical acquisitions. Often, those acquisitions are of high dollar and far reaching technology. The contracts that are created to deliver the finished product/service

currently require a myriad of clauses. Industry contracts, however, are more streamlined. They rely more on the Uniform Commercial Code (UCC) to provide the bulk of contract clauses. Supplements are issued in short 1-2 pages that identify specific contract issues. Experts in the NAVSEA report stated that:

> The program manager isn't informed about the regulations and requirements derived from congressional policy and doesn't particularly care. (1987:82)
>
> The program manager issues technical directions without due regard for the integrity of the contract. (1987:82)
>
> The program managers issue technical directions that exceed their authority and create conflicts over informal changes. (1987:82)

The acquisition process has become immensely regulated and centralized since our nation's beginning. Special interest groups, impacts of scandals and successes, and tensions imposed by conflicting ideologies and personalities have all contributed to create a complex acquisition system (Nagle,1992: 519). A system so complex that "it is inconceivable that one reasonable person or a committee of reasonable people could come up with [it]." (Nagle,1992: 519). Recent guidance found in the Federal Acquisition Streamlining Acts (FASA) have encouraged the widespread application of commercial practices throughout the acquisition process where appropriate. Despite these efforts, specific DoD contract clauses remain plentiful and complex. Room for improvements always exists; however, it is likely that the complexity will remain in DoD acquisitions. The bottom line is that the DoD may always require the expertise of the contracting officer. Even if the program manager and the contracting officer positions were merged, under current conditions, the complex task would simply shift to the

program manager. It is uncertain if that shift would be more beneficial or harmful to the efficiency and effectiveness of DoD acquisitions.

Blurred Authority/Program Influence

Most of the comments from the NAVSEA report focused on the battle over authority between the program manager and the contracting officer.

> The contracting officer holds too much authority, considering most of the negotiated issues directly impact the program. (1987:82)
>
> The contracting officer delays the process. For example, he holds up the procurement request for additional justification when the sole source is obvious. (1987:82)
>
> The program manager is not concerned about justification for sole source procurement and writes sloppy sole source memos. (1987:82)
>
> The contracting officer's authority for the negotiation process is unrealistic because the principal issues at stake are budget and technical, and his expertise does not extend into that area. (1987:82)

Individual responsibilities are assumed by both positions. In order to accomplish some of the tasks, program level authority is required and the two positions are perpetually wrestling for it. That struggle for authority can create animosity between the individuals and throughout the organization. Nevertheless, the program manager is ultimately responsible for the organization and for the program output.

Many authors have stated that a level of authority, sufficient to execute actions to which one is responsible, should accompany a level of responsibility. "[T]he program manager must have authority commensurate with his responsibilities" (Chacko, 1989:111). In the revision of Henri Fayol's classic, General and Industrial Management, he states that: "Authority should not be conceived of apart from responsibility, that is, apart from the rewards or penalties that go with the exercise of power." (Gray, 1987:63)

The parity principle also states that the levels of responsibility and authority should be equivalent:

> A manager's authority should provide him or her with the power to make and enforce decisions concerning assigned or defined duties. Authority without responsibility has no ultimate purpose or justification for existing; likewise, responsibility without authority to carry out assigned duties has a hollow ring. (Terry and Franklin, 1982:223)

The scalar principle states that authority and responsibility should flow vertically from the highest to the lowest organizational level (Albanese, 1975:310). Albanese further explained that the scalar principle establishes clear definitions and assignments of authority. The authority vested in managers/executives should not be split or overlap.

In the program manager's quest to bring the program to completion, they do not always have the authority necessary to do so. The government contracting officer's authority is unique in that it provides a sort of check and balance function to the system. The program manager and contracting officer's commercial counterparts do not have such a rigid safety valve. Industry program managers typically have genuine decision-making authority in regards to the budget and overall project completion (Fox, 1988:308). Government and industry experts collaborated on a defense acquisition guidebook in 1992. In that guidebook they discussed pros and cons of program managers in both industry and government environments. A distinct difference between the authority and control of program managers was that industry program managers had the authority to make timely decisions and control critical resources (Rhoads, 1992: 10-3). A major hang-up for government program managers presented was that our government focuses on process rather than on outcome (1992: 10-7).

Overall Program Effects

The conflict that arises between program managers and contracting officers can have real detrimental consequences to the overall status of the program. Comments from the NAVSEA report cited the following:

> The program manager is consistently tardy in providing specifications in time for proper review prior to issuance of solicitations. (1987:82)
>
> The contracting officer lets too many competitors enter into the competitive range, complicating and delaying the discussion phases of the procurement. (1987:82)
>
> The contracting officer attempts to extract dollars from the contractual agreement, even though it is established that the entire project is under funded. (1987:82)
>
> The contracting officer is slow in his reaction to changes. In fact, he batches the changes that occur, causing further slippage in the program and, therefore, unnecessary cost increases. We are informed that our industrial counterparts have no such problems of delay relating to their changes processes. (1987:82)

Recall that the program manager is responsible for the entire program in terms of cost, schedule and performance. The comments above provide insight into how much negative influence a contracting officer can have over cost, schedule and performance. It is easy to see how a lack of authority can create severe hindrances to the program manager's tasks.

Again, expert opinions of the defense acquisition process over 17 years ago remain pertinent today. The general issues of establishing requirements, following regulations and blurred authority are prevalent in current program manager and contracting officer relationships (Denault, 2000:22).

Much of a government program manager's authority is also dissolved because of the organizational structure. The program offices are matrixed and a big difference exists

as to whom each is responsible. The contracting officer is responsible to the program manager and to his duties as an agent of the government. The program manager is ultimately responsible to the customer and to Congress. Inherent in this matrixed organization is the weakened authority of a program manager. The program manager competes with the functional managers as to who will get the most talented individuals. The inability for program managers to pull experts from the different functional areas demonstrates their lack of horizontal authority. The matrix structure along with the government focus on process versus outcome, tend to create a rigid and formal acquisition process. The government's recent initiatives have been to shift more towards utilizing commercial practices. The current formality of the process was, however, found to be a major inhibitor to incorporating commercial practices (Rhoads, 1992:10-10).

A sense of security can exist in having such a large and complicated acquisition process. The security offered is that the formality will account for a quality product, on time and without wasting taxpayer money. This sense of security comes at a cost. That cost is manifested in a loss in contract flexibility and a stifling of innovative acquisition methods.

Summary

The requisite elements of both vertical and horizontal authority for government program managers are lacking. Government and industry reports have demonstrated this fact. Industry has identified the proper level of authority to vest in its program managers. Since the government is endorsing so many reforms that mirror commercial practices, it will be interesting to see if this particular practice is ever adopted. It is difficult to assess

whether or not the benefits of a streamlined process will outweigh the potential for scandal. The methodology of the study is presented in Chapter III.

III. Methodology

Overview

The purpose of this chapter is to introduce the methodology that was used in conducting the study. This includes a justification for the type of methodology chosen and an explanation of that process. A discussion of the ethics and validity of the chosen methodology will also be provided.

Basis

Identifying the critical roles and gathering information on the appropriateness of combining the program manager and contracting officer roles is difficult to accomplish using quantitative techniques. Objective factors needed for measurement and eventual statistical analysis are complicated to assign and even more complicated to measure. To discover whether the current program manager and contracting officer relationship could be altered, it is necessary to evaluate the current regulations, organizational history and day-to-day operations of a program. The program manager and contracting officer are best suited to discuss and evaluate their own roles and relationships. This research was intended to gather the opinions on (1) whether a change could occur and, (2) to identify the benefits and risks of that change. Those opinions are not captured so easily.

Since no hard data on this subject exists, the research relied upon acquisition experts to provide judgment and opinion on the topic. The qualifications to be an expert will be discussed later. An approach was desired that allowed for both the input of experts and for an exchange between those same experts on each other's inputs. The

participants were from several different locations. A technique was required that allowed for a brainstorm of input from experts who were geographically separated with little or no chance of gathering. A technique that is suited for this type of research is the Delphi.

The Delphi Technique

The Delphi technique is "a method for structuring a group communication process, so that the process is effective in allowing a group of individuals, as a whole, to deal with complex problems" (Linstone and Turoff, 1975:3). While at RAND, Olaf Helmer and Norman Dalkey (founders of the method), first officially used Delphi in 1953 (Dalkey, 1963:458). The study addressed the need to identify appropriate levels of nuclear weapons required for the US arsenal and was sponsored by the Air Force. The first known publication of Delphi was ten years later when it was declassified along with the report (Elsbernd, 1974:49).

The Delphi has been extensively used in both the Department of Defense and industry since the 1950s. Since its public release, the technique underwent early challenges to its validity (Seaver, 1976:42). Perhaps this is so due to the strict procedure that Delphi lacks. Delphi outlines three basic principles (1) anonymity, (2) controlled feedback and, (3) statistical group response (Dalkey, 1969:16). These three simple principles provide a vague outline to the technique. The technique is best suited for facilitating group judgment for subject matter that is lacking or imprecise (Dalkey, 1969:1).

> The structure of Delphi seeks to eliminate the major objections to the use of either a single individual or a conventionally structured group for obtaining a judgment. The Delphi technique thus attempts to improve the reliability and usefulness of expert judgment. (Elsbernd, 1974:2)

Anonymity allows the participants to express ideas without feeling pressure from dominant group members (Dalkey, 1969:16). Turoff and Hiltz presented the following benefits for anonymity (Turoff, 2001:6):

> Individuals should not have to commit themselves to initial expressions of an idea that may not turn out to be suitable.
>
> If an idea turns out to be unsuitable, no one loses face from having been the individual to introduce it.
>
> Persons of high status are reluctant to produce questionable ideas.
>
> Committing one's name to a concept makes it harder to reject it or change one's mind about it.
>
> Votes are more frequently changed when the identity of a given voter is not available to the group.
>
> The consideration of an idea or concept may be biased by who introduced it.

The best opinion may not always come from the most dominant or senior member and therefore, anonymity is also used to eliminate that dominance factor. It was also noted by Turoff and Hiltz, that the act of anonymity should not be taken too far (2001: 6). The researcher should look to create maximum buy-in of the members. Participants that possess a larger sense of buy-in feel more like their contributions are important and will be more likely to participate. Participants are more likely to contribute if they are certain that it is their peers with whom they are debating. The experts feel more appreciated and understood if they know that they are sharing with a peer group. In addition, knowing that they are in a expert group, participants will tend to be more sincere and honest in their responses.

Dalkey mentioned that the feedback should be controlled (1969:16). This is primarily done to decrease the number of duplicate responses. The statistical portion of

the response is used to demonstrate the varying degree to which the participants' answers differed. The statistical analysis of the judgments provide the participants with a clear range of their peers' views and considerations. It is also the researcher's responsibility to reasonably detect any hidden disagreements or biases and expose them for further discussion.

Before the advent of personal computers and the proliferation of email use, the Delphi was executed using paper and pencil between participants that were separated by space and time (Turoff: 2). Multiple iterations of questions and feedback with the expert panel averaged 40-50 days using the mail system (Dunham, 1998:1); whereas a single round can be completed in one to three days using electronic mail. This research was conducted by implementing a hybrid of the paper and pencil method via electronic mail. It differed in the sense that the expert responses were not viewed simultaneously by the panel, as they would be in a true computer based Delphi. That particular alternative method employed using computers similar to a note board, or chat room system. In that application, the participants' comments are posted immediately and open for discussion. The researcher reserved the role of gathering and condensing the panel's responses. After that, the responses were returned to them with instructions to identify the areas where they either agreed or disagreed with the panel input.

Alternative Group Methods

A survey method was not considered in this research effort due to the potential for a large variance in participant response. The first cycle of the Delphi is similar to a survey. However, the multiple iterations, inherent in a Delphi study, help to increase the quality of the responses. "One of the basic features of the Delphi procedures for

formulating group opinion is iteration with controlled feedback. The iteration step is generally associated with convergence (smaller dispersion of answers on the second round) and increased accuracy on a majority of questions" (Dalkey, 1970:1). Another way to gather panel expertise is to bring them together in a meeting format. Several problematic issues arise when performing this type of research when the participants are in plain view of each other. Those problems are in fact the advantages that the Delphi, discussed previously, offers. They include anonymity, no need for co-location, timely and minimize the negative impact of a dominant participant. Most program managers and contracting officers have hectic schedules and could not afford the time to meet repeatedly. Although the Delphi is time intensive for the respondants, it allows them to respond at their leisure. This way, experts can perform their normal duties and not feel the pressure to respond at a set time. This feature helps to further buy-in from the panel. It helps in that it gives professionals the flexibility to respond, whereas a strict meeting time might pose multiple and random scheduling problems for the panel members. Furthermore, meeting formats, require expenses if the experts need to travel to the meeting location. Randall Dunham outlined the Delphi process that was used in this research (Dunham, 1998; 2). The following is an explanation of the process.

Process

Identify the issue and solicit ideas. The first step is to prepare and send the questionnaire, cycle 1, in order to get the participants to engage in an individual brainstorm. Each participant is encouraged to provide as much input as they deem necessary to address the issue

Response to first questionnaire· The participants return their ideas to the coordinator. The ideas do not have to be full developed. It is okay, even preferable, to have the responses be brief, almost in a bullet statement format. The coordinator should not make any value judgments at this point. The Delphi's inherent value is that the experts comment on each other's comments. The coordinator plays no role in evaluating the responses until the cycles are over.

Create and send Questionnaire # 2· The coordinator condenses the responses sent from the experts' first round. Space is provided for comments on the first round responses. This round also asks for any further ideas that were perhaps over looked in the first round.

Response to second questionnaire· The participants anonymously submit their responses to the second question to the coordinator.

Create and send Questionnaire # 3· This step is an interaction of the third step. It asks for continues analysis of the strengths and weaknesses of previous rounds.

Continuation of the process· The coordinator decides whether to continue the interactions or not. If he/ she feels that all the strengths and weaknesses have been addressed and/ or it is evident that nothing new is being presented; then he/ she can terminate that phase of questioning.

Resolution· According to Dunham, resolution may occur in one of two ways. First, the research exercise is declared finished if clear and highly evaluated ideas exist. Dunham states that the ideas should have consensus at exercise completion. The researcher was not looking for consensus among participants, rather a thorough brainstorm of ideas from experts. The wide variance of experience amongst program

managers and contracting officers could prevent complete panel consensus. The resolution of this exercise was established when no further ideas were furnished. This did not imply consensus though. Two basic styles exist for resolution within a Delphi:

(a) *A formal Lickert-style rating*. One of the methods of resolution is to have the participants rate the strength and/ or importance of an issue with a Lickert-Style scale. The coordinator submits a final summary of the ideas, strengths and weaknesses to the panel and has them vote their importance on a scale from 0 (no potential) to 7 (very high potential). The coordinator them rank orders the ideas based on their relative rating.

(b) *Voting*. The participants are asked to rank order the importance of the issues. The coordinator then compiles the responses and tallies the results. In a summary report to the participants, the ideas are listed in an order that represents, from high to low, which ideas got votes.

Research Design

Discussions with Defenses Acquisition University instructors, the author's advisor, and classmates led to the formation of the research objectives in this study. The author's personal interest in the subject matter was the primary factor in guiding the study. The questions used in the Delphi were based upon iterative discussions between the author and his advisor.

The final Delphi consisted of four cycles. The four research objectives were addressed within the four cycles. The first two cycles dealt with identifying the practical roles of the program manager, practical roles of the contracting officer, and any overlap that may exist. The third cycle investigated experiences of overlap that the subjects had

taken part in throughout their career. The fourth cycle was an exploration of the potential benefits and risks of combing the two roles. Exact copies of the information and questions issued to the panel are provided fully in Appendix A.

Expert Panel Composition

The participant categories were chosen based on their contribution to the day-to-day acquisition process of the DoD. Those categories were identified as the government program manager, the government contracting officer and the defense industry manager (Fox, 1994; 13). It is these three positions that have the best perspective to provide input about the status of acquistion relationships. In the attempt to illuminate current issues relative to the research questions, the Delphi interview technique was used. The researcher had originally randomly contacted 25 individuals via phone to participate in this study. Names were gathered from Air Force Material Command Staff in the form of a list. Names were then randomly chosen and subsequently contacted for participation.

The initial intent was that four different groups interact separately over the course of the study. Three groups would have be been homogeneous, one for contracting officers, government program managers and one for industry managers. The fourth and final group would have been a mix of all three groups. This could have allowed for a stronger within and across group analysis. However, after the first round, only the ten experts responded. Fortunately, of those ten, the mix of respondents was as equal as it could have been. Four of them were industry members, three were contracting officers and the remaining three were government program managers. Subsequently, those ten were placed into a single group. This presents a validity threat to this study. It represents

a self-selection bias. This allows for the possibility that the respondents chose to participate because they had an axe to grind and this study provided an outlet.

The Delphi technique is best suited to handle a range of five to nine panel members with a suggested minimum of five members (Meyer and Booker, 1991: 87). This study established an initial group size of ten members. The larger panel was initiated to mitigate the risk of too small of a panel if participation waned. The breakout of the member categories was three government program managers, three government contracting officers and four defense industry managers.

All contracting officers were Level III certified; however, no program manager certification level was identified in this study. Two were military and one was a civilian. The requirement for all government and industry managers to be qualified for this study was ten or more years experience with government acquisitions. No Acquisition Category (ACAT) level experience was specified. All government experts worked for the Air Force. Industry members' experience varied across the military services.

Advantage of Triangulation

This Delphi study collected input from experts over a period of several weeks, simultaneously collecting it from geographically separated subjects. This is a benefit that the Delphi offers but it is also an advantage of triangulation. Triangulation offers the comparison from many different vantage points in order to minimize faulty information that experts could potentially provide. Triangulation is the comparison of different interviews and perceptions of the same expert (Dooley, 1995:260). This comparison adds strength to this methodology because any opinions offered by the experts that are

different or faulted in reasoning can be addressed. A single measure would not be able to filter faulty responses.

Summary

The spirit of the study started with some general questions, rather than a hypothesis, in an attempt to get a pulse on acquisition relationships. In this research, the Delphi method was used to gather the input data. Some studies have been performed on the same topic; however, the spirit of the study remained more exploratory than confirmatory in nature. Analysis of the Delphi data is presented in the following chapter.

IV. Results and Analysis

Overview

This chapter provides a detailed account of the expert subjects' responses to the multiple Delphi cycles. This study included four cycles conducted over a period of four weeks. The data is presented in the chronological order in which the cycles were executed. Describing the roles of any government position would be easy if one were to use official job descriptions or training texts. It was the intent of this study, however, to gather perceptions of roles from the people that actually perform them. This study did not start with any specific hypotheses. Despite that fact, some underlying preposition might be considered intuitive when considering the high sensitivity of this subject matter. For instance, it will be interesting to note whether program managers become advocates for an increase in their authority. Likewise, it will be interesting to see if contracting officers are supportive of a move to reform the current authority roles. For purposes of this study, those thoughts are merely anecdotal insights into the potential responses to expect from the panel.

The presence of defense industry managers in this study adds another dimension to the perceptions of authority in government contracting. For the most part, industry managers are customers for what the program manager and contracting officer can provide in terms of communication, personal skills, technical skills and overall contract representation. The probability that the three groups will disagree in their attempts to identify authority overlaps is so great that just the verification that disagreement exists

would be interesting enough. Fortunately, this study will also potentially capture specific issues of conflict amongst and/or between the groups.

Delphi Cycle 1

In accordance with the process outlined in Chapter III of this report, the first cycle was sent to all the subjects via electronic mail. The subjects were asked to engage in an individual brainstorm on the issue posed to them. The first round included ten experts. The response rate was 100%. Their responses varied in regards to form. Some subjects replied in bulleted phrases while others used a sentence and paragraph format. The format of their response was not an indicator of importance of their comment. It was stated in Chapter III that short and concise statements are often preferable.

The first cycle included background information and definitions of a program manager and a contracting officer similar to information provided in Chapter II. This information was provided in order to establish a common starting point for the subjects to expand upon. Three questions were sent out in Cycle 1.

Question 1. What are the critical roles that the program manager performs for a program?

Program Manager Responses. All respondents noted that the program manager has an overarching responsibility to bring the program to a successful completion. Panel members stated that the program manager should have: "leadership and vision" for the program, "responsibility to see that program objectives are established and achieved." The group comments provided insight into their perceptions that the program manager had more of a broad role in working to accomplish the program objectives. The

comments demonstrated an understanding that the program manager is responsible for the cost, schedule and performance of the contract. Overall, respondents' comments were in harmony as to the varied roles of a program manager, although one of the respondents had a more specific role identification that was quite noteworthy. That particular role was that the "Program manager ensures that the contractor is performing the work specified in the contract." This comment was noted by the researcher because of the potential it had to draw criticism from the other groups in successive Delphi cycles. In an effort to better clarify the group opinion on this issue, the comments were reintroduced in Cycle 2.

Contracting Officer Responses. All respondents noted that the program manager has an overarching responsibility to bring the program to a successful completion. As with the program manager group, this group also identified the program manager as the primary point of contact for the program: the program manager is the "focal point for providing status," "final authority in defining requirements," and "responsible for developing and documenting the acquisition strategy." Two of the three contracting representatives focused on the program manager as an integrator of many functional activities as a primary role: "ensure functional roles/responsibilities are appropriately involved," and "serves as an integrator between the various functionals." The responses were not that different from what was provided by government program managers. Overall, respondents identified the primary roles of the program manager as one of integration and oversight of resources in order to achieve the program objectives. All respondents confirmed that they viewed the program manager as the one person responsible for cost, schedule and performance. Interestingly, one member added that

along with that responsibility comes the consequences of not meeting the program objectives. That member, however, did not provide any examples of consequences. This issue was carried into Cycle 2.

Defense Industry Manager Responses. All respondents noted that the program manager has an overarching responsibility to bring the program to a successful completion. As with the responses from the first two groups, this group identified management of functional activities as a major role that the program manager plays: "for coordinating and integrating activities across multiple, functional lines." All four of the industry members made initial comments that spoke for the program manager being the primary source for communication, authority and execution of the program: "program manager is the primary interface for the program, both for internal and external contacts," "program manager's responsibility is successful program execution," and to "maintain effective communications with the contractor." One of the members in this group was intent upon stating that the program manager should have only a general understanding of all the functionals they represent.

Another major theme of the industry member responses was that the program manager should have the resources necessary to accomplish the program objectives: "ensure that he/she has the resources to perform the defined work effort within the prescribed timeframe," and "defines the resources needed to accomplish the SOW." Overall, the respondents clearly identified the program manager as the focal point for internal and external activities with the need to acquire and maintain adequate resources to accomplish the project. This issue was also addressed in Cycle 2. Table 1 depicts the total group input for identifying program manager roles.

Table 1.

Program Manager Roles – Responses from All the Groups for Cycle 1

Role Response
1. The PM's main function is to take the requirements, funding, and schedule the user gives him/her, get the product developed, and then deliver the product
2. PM is the primary interface for the program, both for internal and external contracts
3. Most critical role a PM plays is to make the programmatic decisions to manage the risks on the program
4. Solely responsible for the cost, schedule, and technical performance of a program (2)
5. Ensures that funds are provided as needed to accomplish the work (2)
6. Ensures all program approvals are in place
7. Ensures that the contractor is performing the work specified in the contract
8. Handles all outside briefings in initiation and execution of program
9. Schedules the program
10. Determines adequate Integrated Product Team staffing
11. Coordinates between functionals during all phases of the program (3)

Note. The number of experts reporting the same role appear in parentheses at the end of the comment.

Question 2. What are the critical roles that the contracting officer performs for a program?

Program Manager Responses. All of the respondents believed that the primary role of a contracting officer was to establish and maintain the contract in accordance with applicable laws and regulations. Comments emphasizing this legal role included: "they know all the contract law," "ensures the contract is written properly," and "ensure contractual compliance with law, and DoD regulation/policy." A general agreement existed that contracting officers oversee all actions required to be put on the contract.

Two of the three members said that the contracting officer should bring more of a business approach to the program: "given budget, schedule, completion and market realities, [the CO should] develop an executable business approach." It appeared as though the comments suggested that the contracting officer position remain a functional specialty within the reach of the program manager. Perhaps in order to guide a program through the web of regulations and laws required, a contracting officer should be able to provide optimal business alternatives to the program manager.

One respondent stated that a role the contracting officer should "keep over-zealous program managers from doing anything illegal." This was an interesting comment coming from a program manager. Illegal actions could be made in a variety of ways. To decision makers, illegal decisions can be far from improper decisions. It becomes an issue of intent and highly subjective to enforce. The researcher found this to be a profound statement and to included it in the follow-up cycle. Overall, the respondents identified specific activities that the contracting officer is responsible for. At

this point, it seemed evident that disagreement between the groups and within the groups were likely to occur in the second cycle.

Contracting Officer Responses. All of the respondents believed that the primary role of a contracting officer was to establish and maintain the contract in accordance with applicable laws and regulations. Two of the respondents offered that the contracting officer role should be synonymous with that of a business advisor: "keeps the program business oriented," and "provides contractual guidance to the Integrated Product Team." These comments correspond with current literature on the changing role of a contracting officer. One respondent quoted the Federal Acquisition Regulation, which says the contracting officer should consider the advice of specialists such as auditors, lawyers and other fields as appropriate. The researcher found this to be of particular interest. The statement demonstrates that the contracting officer has the responsibility to consider outside professional input but the authority to dismiss it with proper justification. It is the researcher's hope that the entire group discusses this issue in future cycles and equates it to the program manager's lack of authority to justify contractual decisions. Overall, it was clear that the respondents in this group identified the practical and critical roles of a contracting officer to be that of a legal and business advisory nature.

Defense Industry Manager Responses. The respondents had no overwhelming group agreement for this initial cycle. The group, overall, believed that the contracting officer is responsible for developing and executing the contract. A detailed understanding of the Federal Acquisition Regulation and other regulations was implied. One member stated the contracting officer is responsible for monitoring contractor performance in terms of cost accounting and auditing. This same member previously

identified contractor monitoring as a program manager role. Without any iterations of the Delphi complete, was interesting to note that according to this individual, the potential for overlap in this area had begun to manifest. Two of the members in this group had made relatively profound statements germane to the authority relationship between a program manager and a contracting officer. The role of the contracting officer should take a back seat to the direction and goals of the program manager: the contracting officer is a "staff function supporting the program manager with information and insight into contract related issues," and "take into account the program managers desired outcomes and finding the way to successfully accommodate those outcomes." Another member made a comment in support of this by stating that the contracting officer should be an advisor to the program manager on contract related issues.

It appeared that the overall belief of the defense industry managers, after the first cycle, was that the contracting officer brings sufficient knowledge and skills to the program. However, it all should be focused towards the program manager's direction. Unlike the government group that mentioned the position as a safety valve of legal proportions, the majority of the industry group placed the contracting officer in more of a support role along with the other functionals. One industry member stated that the contracting officer is the sole voice to the contractor. It was unclear at that point if the member was stating that was how it actually works, or if that is how it should work. It also highlights another area for further discussion since the same individual identified a primary role of a program manager to be the primary interface for external contacts. This issue was carried forward and addressed in Cycle 2. Table 2 depicts the total group input for identifying contracting officer roles.

Table 2.

Contracting Officer Roles – Responses from All the Groups for Cycle 1

Role Response
1. Experts in translating the Federal Acquisition Regulation and other laws/regulations
2. Ensure all contract actions are taken within the lawful constraints of the contract (3)
3. Find ways to successfully accommodate the PM's desired outcome within the legal bounds of the contract (2)
4. Sole voice to the contractor for contractual direction
5. Ensures funds provided by the PM are obligated on the contract
6. Keeps over-zealous PMs from doing anything illegal
7. Given budget, schedule, competition and market realities, develop an executable business approach
8. Oversee all actions required to put the requirement on contract
9. Ensure fairness and reasonability of contract prices
10. Ensures that the contractor is performing the work specified in the contract

Note. The number of experts reporting the same role appear in parentheses at the end of the comment.

Question 3. Do their roles overlap? Clearly identify what roles are overlapped.

Responses to this question tended to be longer than some of the bulleted statements provided by the panel for the first two questions. It is important to note that at this point in the study, other participants had viewed none of the comments. The comments for all three questions thus far were submitted in a single round. This is important because even before the individuals' comments were forwarded to the group, inconsistencies began to develop in the members' own arguments. These differences are highlighted along with the regular feedback in this section.

Program Manager Responses. All of the respondents believed that that contracting officer was best suited to handle the detailed contract issues and that the program manager handled larger, programmatic issues. However, two members stated that the positions do indeed, overlap. The first excerpt addresses a serious issue: "Certainly in the day-to-day effort of acquisition and program execution, there are times when the program manager and contracting manager [contracting officer] both attempt to influence event outcomes."

Having two individuals, with potentially separate agendas and attempting to direct a major project, seems fundamentally flawed at first glance. The member who made this statement caveated it by saying in his experience, in healthy program offices, the two roles are "fairly independent of each other." It is interesting to the researcher that two conditions were mentioned in order for the roles not to overlap. The first one was that a "healthy" program office was required. Healthy is quite subjective and even more so when attempting to identify any government office as such. Secondly, the adjective of "fairly" for independent was used. Again, even under conditions of a "healthy" program,

the roles remain partially overlapped. The second member believed that some overlap existed and stated:

> Yes. Many times, I have my contractor to commence doing something, knowing that the work was contractually authorized, the funds were on contract, and test approvals had been issued by the appropriate person

According to current obligation authority law, this type of overlap would be direction from an unauthorized agent of the government. Despite the argument of legal or not, the member makes a great point in that he used his judgment with all available information and proceeded with some action. That action undoubtedly saved some time in the process. Only one of the government program managers stated that the roles are uniquely independent:

> No, I think they are separate and should be. The PM is driven to see that the program meets the objectives and the CM makes sure the program progresses contractually, which is good.

The member offered no other justification for why he thought that no overlap existed in their roles. Overall, this group offered some direct insight to existing overlap.

Contracting Officer Responses. All respondents believed that the program manager and the contracting officer work closely in the program; however, no strong arguments were made to support an overlap in their roles. It appeared that the group defined the overlapping roles as mere overlaps of academic perspective. Two of the members' comments were:

> Given that contracting must also consider a broad spectrum of technical, financial, legal, and contractual issues, the roles would overlap. However, the perspectives and reasons differ.

> Both parties are responsible for communicating with contractors; however, [the] program manager should be discussing technical issues and PK [contracting] should be discussing contractual/money matters.

The researcher found the second comment of particular interest. The comment was from an individual who outlined immense authority for the program manager to be the focal point of the program. Furthermore, the program manager was said to have the critical responsibility of "controlling schedule and milestones" and to be the "final authority" in defining the requirements. The researcher was keenly interested in the apparent conflict within the member's own response. Perhaps the conflict was not direct, but it did raise questions of how the program manager is to be the final authority on issues in a program when someone else is solely responsible for the contract and money issues. The only contracting member that stated some overlap exists said it occurs when "program responsibility conflicts with legal/business responsibility." Arguably, a program is nothing but a legal, business responsibility; therefore, the program responsibility will perpetually provide overlap.

Defense Industry Manager Responses. The response from this group was mixed. The range of the responses was from agreeing to some overlap to sometimes to not at all. Two of the members, seeing some overlaps occur, stated:

> By definition, the program manager & contracting manager [contracting officer] roles overlap...The contracting manager is mainly concerned about 'Does the product the contractor is developing meet the contractual requirements?' Hopefully, the contractual requirements are the same as the user's requirements, but that's not always the case
>
> Currently the contracting [officer] must set up the contract. However, once a contract is created, the program manager and contracting officer duties can overlap.

The respondent that made the second comment above also added a recommendation that could provide potential benefit of easing some restrictions on the

overlap: "If program managers could make some decisions, it would reduce contracting manager workload that would typically result in backlog." One respondent specifically noted that a difference exists between large and small programs. He responded that large programs are too complex for the roles to be literally overlapped; while smaller programs could entertain combining the positions.

> For large, highly complex programs, typically involving multiple contracts, I believe that there are distinct sets of knowledge that the PM and CM must have...For small, less complex programs, I think the PM could fill both roles.

One final group member responded that no overlap in the roles exists. In response to the question he stated, "Not really. Each has a similar but differing role." It is not exactly clear as to the intent of this statement since the participant followed it with a statement that he believes the contracting officer plays a supporting role in respect to the program manager's direction. Although, not too enlightening, the comment was considered since it could provide for further discussion in later rounds of the Delphi. Overall, respondents implied that an overlap existed and in certain circumstances, efficiencies could be gained by combining the two positions. All the comments provided in this cycle were provided back to the group for additional comment in Cycle 2. Table 3 depicts the total group input for identifying role overlap.

Table 3.

Rate of Response to Role Overlap

	Stated "No Overlap"	Stated "Yes, overlap exists"
Industry Program Manager	1	3
Government Contracting	2	1
Government Program Manager	1	2

Delphi Cycle 2

The expert responses from Delphi Cycle 1 were condensed and sent back to all of the panel members. Once Cycle 1 ended, the responses were compiled with duplicate responses being removed. Due to the potential for nebulous interpretation of some responses, the researcher was careful not to assume specific responses as exact duplicates of each other. For that reason, some of the responses may be derivatives of a basic understanding and were henceforth retained in the table for further discussion. The researcher did not make any value judgments at this point in the cycles. The expert panel had the opportunity to make value judgments on their peers' comments in the second round. Participants were encouraged to utilize as much space was necessary to provide comments on the first round responses. Participants were also tasked with identifying any ideas that were overlooked in the first round; however, no additional inputs to the roles of a program manager were provided by any of the panel members in the second cycle. The instructions and summary for cycle two is provided in the Appendix.

Participation in this round dropped to 80%. The panel mix was three industry representatives, two government program managers, and three government contracting officers. Several individual comments were made on almost every initial role of a program manager and contracting officer. Since the panel members had the opportunity to respond to all of the comments, if a previously identified role did not have a specific comment, the researcher counted it as a passive vote for agreement.

Agreement on Program Manager Roles

For the eleven initial roles that were identified in the first cycle, five of them were met with complete agreement across all of the groups. The roles with complete agreement are listed in Table 4. All participants agreed with them as statements of critical roles that a program manager performs. The remaining roles drew comments from panel members. The exceptions that were taken to the initial list of roles were grouped in one of two categories, exceptions of *degree*, and exceptions of *role*.

Exceptions of Degree

For purposes of extracting the range of agreement among the panel members, it was important to key on even the slightest hint of disagreement. A few of the respondents provided responses that did not disagree with an identified role; however, they were compelled to adjust the strength of an adjective or two within a role. Only three members provided responses that made exceptions of degree. The role is abbreviated in the following section only to provide a quick reference for the reader.

Table 4.

Agreement on Program Manager Roles

Role Response
1. The PM's main function is to take the requirements, funding, and schedule the user gives him/her, get the product developed, and then deliver the product
5. Ensures that funds are provided as needed to accomplish the work
9. Schedules the program
10. Determines adequate Integrated Product Team staffing
11. Coordinates between functionals during all phases of the program

Role #2, *Program Manager is the primary interface for the program, both for internal and external contracts.* A contracting officer member brought exception to this by insinuating it is a potential problem of the process: "Maybe that's the problem. Some program managers cannot answer questions in functional areas because they do not take the time to understand the functional issues." The exception was not made as to whether or not it is a critical role, rather, that it poses a potential harm to the process in some instances.

Role #3, *Most critical role...to manage risks on the program.* The same contracting officer that took exception above, along with and industry member, gave responses to this role but each for separate reasons. The contracting officer stated that this specific role is "The only real critical role" a program manager has. The industry member's comment was the polar opposite of the contracting member's input. He stated that the role is important, but he would not go so far as to say it is the most important.

The comment made by the contracting member was interesting because it seemed to imply that their perspective of program manager roles is limited. For a contracting person to identify a single critical role, it appears as though they are making an argument for the contracting officer carrying a larger portion of the acquisition responsibility.

Role #4, *Solely responsible for cost, schedule and performance*. Only one government program manager member took exception to the strength of the adjective 'solely' in the text of the role. He stated that the isolation of the program manager's abilities to handle cost, schedule and performance was too severe:

> There are many reasons beyond the program manager's control or influence that can prevent these goals from being achieved. When such problems arise, the program manager should address them to the best of his ability...

Exceptions of Role

Unlike the previous exceptions, other exceptions were direct disagreements between the panel members as to whom the particular role belonged to. Many different factors could have contributed to the following disagreements. Experience in acquisitions as well as the type and size of programs in which that experience was obtained, are important to consider when analyzing the data. Four of the eight members in this cycle took exception to three roles from the first round. One was a government program manager, one was a government contracting officer and two were industry members. It should be noted that it was the same contracting member that made exception comments of both degree and role. No other contracting members made comments on the program manager role in Cycle 2.

Role #6, *Ensures all program approvals are in place*. A government program manager provided the following exception, "This could be argued since the program manager is head of the Integrated Product Team; however, the program manager has very little to do with Justifications & Approvals other than sign his name to the document." The contracting member simply added that this role is overlapped.

Role #7, *Ensures contractor is performing the work specified*. Five of the eight experts had no disagreement with this statement. Both an industry and government manager along with a contract member commented on this role. All three members believed that the role was not one for the program manager.

> Not the program manager's job. There is an entire contracting and contract administration (Defense Contracts Management Agency) infrastructure set up to do this. (Government manager)

> Weak—the progress reports/DD250s go to the contracting officer and the contracting officer in turn has the program manager coordinate...overlap exists. If problems exist, the contracting officer is the only one who can direct/authorize changes.
> (Contracting member)

> Although this statement is correct, I believe most program managers are more concerned about whether the contractor is performing the necessary work to get the product the user wants. Hopefully, that is the work specified in the contract. I have found the statement above [Role #7] more often in the role of the contracting officer.
> (Industry manager)

The contracting member response to Role #7 was of particular interest since it touched on the authority available to the contracting officer to administer contract changes. In Chapter II, literature demonstrated the success of the Uniform Commercial Code in ensuring the success of so many commercial contracts. In this situation, if a problem indeed exists on an established contract, it would seem that a program manager could correct the situation since they are already required for coordination. The industry

manager brings out a good point too. He raised the issue that contracting personnel can become more focused on the terms and conditions of a contract rather than the intent of the contract. The researcher clearly identified this as an issue for discussion in Chapter V.

Role #8, *Handles all outside briefings in initiation and execution of program.* All participants agreed with this role with the exception of one industry program manager. That one member simply noted that in their experience, this role was more likely to be delegated.

Agreement on Contracting Officer Roles

For the ten initial roles that were identified in the first cycle, six of them were met with complete agreement across all of the groups. These roles are displayed in Table 5. All participants agreed with them as statements of critical roles that a contracting officer performs. The remaining roles drew comments from panel members. Unlike the exception categories used for the program manager roles, the nature of the feedback for the contracting officer led to different categorization. The exceptions that were taken to the initial list of roles were grouped in one of two categories, exceptions of *implementation*, and exceptions of *role*.

Exception of Implementation

This section addresses panel member inputs that were not direct rebuttals to the role assignment. This category attempts to identify responses that are more closely tied to the motive or action of a person. Three of the eight members in this cycle took

exception to three comments from the first round. Only program managers took exception to the roles of the contracting officer. One was a government program manager and two were industry members. It was interesting to note that none of the contract members provided any feedback on their roles. They all agreed with what was provided. The only comment by a contracting member was to add roles to the list.

Table 5.

Agreement on Contracting Officer Roles

Role Response
1. Experts in translating the Federal Acquisition Regulation and other laws/regulations
2. Ensure all contract actions are taken within the lawful constraints of the contract
4. Sole voice to the contractor for contractual direction
8. Oversee all actions required to put the requirement on contract
9. Ensures fairness and reasonability of contract prices
10. Ensures that the contractor is performing the work specified in the contract

Role #3, *Find ways to successfully accommodate the program manager's desired outcome*. The industry member gave an example of how he agreed in theory; however, the practical realities that interfere with text book ideals was demonstrated:

> Although I agree this should be the role of the contracting officer, in my experience, most of the contracting officers I've dealt with didn't want to think "outside of the box" and "accommodate" the program manager. They wanted to fit every contract action into the contractual mold they are most comfortable with.

This comment simultaneously addressed other pertinent issues that were mentioned in the literature reviewed in Chapter II. The statement silently alludes to a couple of problems in acquisitions today. The first is that contracting officers might not be educated enough to provide a wide range of contracting options to the program manager. Secondly, perhaps it is not the training or experience that is lacking, but rather the contracting process has become so laden with specific and unique clauses that it is difficult to become proficient anymore.

Role #5, *Ensures that funds are provided as needed to accomplish the work*. The industry manager that provided a response to this role was interested in establishing a single interface to a contractor. Sometimes confusion can consume a contractor if they are getting mixed messages from the program manager and the contracting officer. It is likely that this comment came from a personal experience perhaps because no other expert panel members made a comment here.

Role #6, *Keeps over-zealous program managers from doing anything illegal*. One government program manager took objection to the statement. The program manager stated, "Perhaps come contracting officers feel this way, but the job is to be a business advisor." This response came from the same program manager that had earlier

identified the contracting officer as an advisor, subordinated to the program manager. Before the researcher began the study, he met with this manager repeatedly and it was parts of those discussions that helped to draft the outline for this study. This program manager is a vivid advocate for redefining the role of a contracting officer into more of a business advisor. It is unclear whether that new role would bring added responsibility and authority, or if it would weaken authority from what it is today.

Exception of Role

This section addresses the panel member inputs that were direct rebuttals to the role assignment. Two of the eight members in this cycle took exception to the seventh role listed from the first round. Only industry managers took exception to that particular role of the contracting officer. No other roles were disputed.

Role #7, *Given budget, schedule, competition and market realities, develop an executable business approach.* Two industry program managers both agreed that this specific role was one for the program manager. The industry members stated: "The contracting officer should play a critical role on the Integrated Product Team, but developing the acquisition strategy is a role of the program manager," and simply "this is a program manager role."

Additional Cycle Inputs/Comments

Only a few additional roles were added to the already long list of critical roles for the contracting officer. A contracting panel member contributed the most to this list. It is apparent that that individual's perspective is profoundly centered upon the self proclaimed *wondrous abilities* that a contracting officer brings to a program office.

Those three specific comments are listed first:

> Key business advisor to the program director on all aspects of the acquisition. In many cases, the contracting officer has the corporate knowledge and work experience in the program office...
>
> The contracting officer is the key acquisition strategist/planner who has accumulated specific and broad experience which is a force multiplier.
>
> The voice of reason to interject that maybe a better idea or approach to procuring/fielding requirements and obligating funds.
>
> Ensures fair value for the United States taxpayer
>
> Contracting officer should service and support the program manager once the contract is in place.

Responsibility Overlap

The participants' disagreements became highlighted in the second cycle, especially in the discussion of whether or not the two roles overlapped. Most of the panel members had additional comments to make in regards to the status of overlap between the two positions. However, the industry members responded with the most disagreement of input made in the first cycle.

Three of the eight members disagreed that the program manager and the contracting officer roles were independent of each other. All three of those who disagreed were industry program managers. An argument posed by two of the responses was that, in smaller program offices, it is likely that the program manager indeed does perform many of the contracting officer's tasks. Another response claimed that the roles overlap by definition.

All eight of the respondents agreed that the contracting officer's training and education are necessary to establish the contract since the program manager is not trained to do this. Two industry panel members added the following:

> I think the contracting officer has specialized knowledge and training that necessitates his participation, even if only in an advisory role, on all programs.

> Program managers don't have the training to solicit and establish contracts

A wide range of disagreement is prevalent in regards to the program manager having the authority to give a contractor direction without the contracting officer's approval. An industry member added that a program manager providing contractor directions was an issue of process rather than one of role.

> Well-planned programs with clearly defined roles/responsibilities and established processes go a long way toward resolving such issues.

A government program manager stated, "Just because the program manager did something illegal, that does not mean there is overlap." An industry panel member provided the only other comment that was attributed directly to the original input. He stated simply that it is the norm for program managers to issue direction. He caveated his input with the fact that issuing direction is okay, as long as it is formally followed up by contracting officer action.

Delphi Cycle 3

The purpose of this cycle was to extract real world examples of overlap. Expert responses to this question were compared to issues that cause acquisition complexity, as covered in Chapter II. Specifically, the researcher's first goal was to see if any practical examples of overlap existed among the panel members. A sub-goal for this search was to

provide an environment so experts would feel welcome and trusting in the environment of their information exchange. This was important because without the trust of the experts, they may not have been willing to provide personal experiences; especially if those experiences could place them in a bad light. The second goal of this cycle was to see if the random sample of experts provided experiences that confirmed the factors of conflict among acquisition professionals.

Many other research direction options existed before initiating Cycle 3. A great attribute of the Delphi technique is the research focus can evolve as time goes on. While some issues could potentially last for a dozen or more cycles, some issues can be fully addressed in only one or two cycles. Time constraints led the researcher to close out the first two cycles and progress to this new line of questioning. The discussion could have been guided towards the education, training, and experience requirements of program managers and contracting officers. Many of the comments touched on this along with some of the literature in Chapter II.

Discussing the benefits and hindrances of the government's heavily regulated acquisition process was another path that was considered. The mix of the group, along with their demonstrated sound and pertinent input, probably could have provided some good data. The particular path that was finally chosen for Cycle 3 was considered more in line with the first two rounds. The responses were thought to be able to best complement the comments previously gathered.

After the experts had been asked to identify the roles of program managers and contracting officers, Cycle 3 asked the experts to relate their experiences to the panel. This round of questions was designed to seek out practical examples of experts

performing roles that overlapped. Seven panel members responded in this cycle, thus making the response participation 70%. The member mix for this cycle consisted of two industry, two government program managers, and three government contracting officers.

Nature of Responses

Since the two questions for this cycle are so closely tied, the responses for question one and two will be presented together. Responses to this question tended to be longer than even some of the previous statements provided by the panel for the first two cycles. It is important to note that when these responses were submitted, the group had not engaged in a direct personal experience exchange yet in the study. Amazingly, many of the responses had similar degradations of authority occur within the program. A startling note when studying the responses was that four of the five responses, including all contracting members and one program manager, blatantly identified the other party as incompetent and untrained. One government program manager stated that his motives were more along the lines of program efficiency rather than compensating for program deficiencies as the others alluded to. Their stories and justifications are presented below.

Question 1. In your experiences as a (Program Manager/Contracting Officer-whichever you may be), what functions (i.e. day-to-day responsibilities) have you performed that would typically be defined as the other's (Program Manager or Contracting Officer) role?

Question 2. What events led you to take on that responsibility? Characterize the situation.

First Program Manager Response. The respondent noted that he had a personal experience when, as a program manager, he performed tasks that were otherwise reserved for a contracting professional:

> To the best of my recollection, documents that I prepared that became part of the contract were because as program manager, I had the best understanding of the technical requirements. The contracting officer then ensured that they were in the proper format for inclusion in the contract.

This excerpt appears to be an example of how the two positions can work together and maximize the usefulness of their roles. The respondent retained specific details; however, with the information provided, one could deduce that the role of a contracting officer to oversee all actions required to establish the contract (Role #8) was met. The respondent portrayed, ever so subtly, that in this experience, team work, trust, and communication were well at work between the two parties: "Common sense and wanting to get the job done quickly and efficiently" led to his action.

Second Program Manager Response. The respondent noted that he had a personal experience when, as a program manager, he performed tasks that were otherwise reserved for a contracting professional:

> As a program manager, I regularly give the contractor "direction" on how to proceed. In most cases, I probably give more direction on technical issues, but I've given guidance on financial matters, logistics issues, etc. For "big" changes in direction, I typically follow-up my verbal direction with a letter from the contracting officer...or have the contractor send a letter recommending the approach so we could just "concur" instead of writing the letter ourselves.

In this excerpt, the program manager appears to be executing as much contract authority as possible, and then some. This experience is representative of how a program manager can and does execute a program with practically plenary authority. Going along

with the previously identified, second role of a program manager, he was the primary for both internal and external contracts. In this experience, the program manager's contracting counterpart did not perform many of the critical roles of a contracting officer, which were identified in the first two rounds. Overall, the experience alluded that the contracting officer was not accommodating the program manager, not being the sole voice to the contractor, and not overseeing all actions required for the contract. It appears that the program manager had found a hybrid authority relationship, which allowed him to execute the program. The respondent stated that the technical knowledge was vital. The member's reason to taking the action was: "The contracting officer does not understand technical and schedule issues. And does not need to, to the extent that the program manager does."

First Contracting Officer Response. The respondent noted that they had a personal experience when, as a contracting officer, they performed tasks that were otherwise reserved for a program manager:

> As a contracting officer, I have performed financial management functions, logistics and intimately involved in finding solutions to technical problems that impact cost, schedule and performance.

Current trends in the DoD actually support an Integrated Product Team approach for acquisitions. The program manager and the contracting officer work closely in that situation to find solutions to technical, cost, schedule and performance dilemmas. The respondent alluded that they performed these tasks alone. This certainly is an overlap of the fourth role of a program manager, which is the responsibility for cost, schedule and performance. This was the first of three contracting member responses that clearly defined a lack of both knowledge and presence of the program manager as the catalyst in

their actions: "I took on these responsibilities because of corporate knowledge, experience, lack of program manager experience and DoD personnel downsizing (pink slips)."

Second Contracting Officer Response. The respondent noted that they had a personal experience when, as a contracting officer, they performed tasks that were otherwise reserved for a program manager:

> Developed the System Acquisition Master Plan (SAMP), along with obtaining SAMP coordination/approvals. Performed source selection briefings.
>
> Managed the Contractor Performance Assessment Report (CPAR) program.

The discussion about role overlap is similar to the First Contracting Officer Response. An important note for this respondent's response is the explanation for why the overlap of duties occurred: "Program manager was either so busy with other issues, or on Temporary Duty (TDY) that the task fell to me." In addition, the "Program manager was untrained and incapable of doing the briefings and running the CPAR program."

Third Contracting Officer Response. The respondent noted that they had a personal experience when, as a contracting officer, they performed tasks that were otherwise reserved for a program manager:

> Acted for program manager when directing paint, setting requirements, schedule, options, funding and meeting schedules.

Several roles were identified that were overlapped in this experience. The 1,2,4, and 9 roles of a program manager were overlapped. In sum, the overlapped roles usurped any authority that the program manager had over cost, schedule, and performance. They

state: "Because program managers are not aware, untrained, not around, TDY ALL THE TIME, and sometimes just plain incompetent." This personal excerpt is the third and final contracting member response that brought a disturbing occurrence to light. The fact that three geographically separate contracting officers noted that their program manager is so busy, or TDY so often, or even ill trained to handle the job is alarming to the researcher. This issue is revisited in Chapter V.

Defense Industry Manager Responses. Both of the industry members responded to the question with a neutral response. Neither of them said that they had performed any actions that were typically performed by the other position.

Delphi Cycle 4

The purpose of this cycle was to identify and discuss the consequences of combining the roles of a program manager and a contracting officer into one position. Although this cycle is not a direct continuation of any of the previous cycles, it does present an interesting subject matter that strikes at the very existence of either career field. The intent of the research for this cycle was to have current acquisition professionals comment on the benefits and risks of providing a single individual with both programmatic and contract agent authority. This cycle completes the intent of the study, outlined in Chapter I.

The respondents have now been taken through three cycles. They started by identifying the roles of each position and any overlap they may have. After responding to those initial inputs, the subjects then provided personal experience of performing the other position's duties. The depth and frequency of overlap provided by each member varied. If some roles can be performed by either position, and people are doing it

successfully today, it suggests that some change in traditional authority balances could occur. Five panel members responded to this cycle, thus making the participation rate 50%. Participation was definitely showing signs of waning as the study reached into the fourth consecutive week. Despite only half of the members responding, five panel members remain in the acceptable range for a Delphi study. To this study's benefit, the mix of the panel remained balanced throughout the cycles. At no time did one group dominate the response rate. The member mix for this cycle consisted of two government program managers, two government contracting officers and one industry manager.

The automatic reaction to such a proposal typically is that the current check and balance system is vital to facilitate public trust. The researcher hypothesized that the program managers and defense industry managers would be in favor of combing the roles and the contracting officers would, however, be against it. Program managers were thought to likely respond in favor of the combination because of issues addressed in detail in Chapter II on authority. The program manager role carries tremendous amounts of responsibility and accountability; however, as the literature proved, the government does not pair that high level of responsibility with a sufficient level of authority. Industry managers were also expected to support this shift in authority for two reasons. The first is that they are customers and have to interact with both the program manager and the contracting officer. It follows that a single focal point for communications, direction and interaction could decrease inefficiencies and increase relationships with industry partners. The second is that within their operations, commercial industries have to establish specific and often separate functions to deal with the government. It would be to their benefit to provide a single point of authority in which to communicate.

Contracting officers, on the other hand, were expected to refute the idea of combing the roles. This is because the researcher, in the contracting career field himself, discussed this issue with his advisors and classmates repeatedly and admits to a general consensus that, contracting officers feel they provide "a last line of defense" in acquisition decision making. This is similar to Contracting Officer Role #6, "Keeps over-zealous program managers from doing anything illegal." Perhaps this is not the correct philosophy to maintain. It would be interesting to know whether this general thought is acquired from being institutionalized in the career field, or if it arises from a personal insight into the process.

Question 1. The program manager has been issued a warrant. Identify both the benefits and the risks of such an action.

The responses that were provided for this cycle offer some insight into potential benefits and risks of combining the roles of a program manager and a contracting officer. All of the responses for the benefits could be placed into three broad categories. Combining the roles would, streamline acquisitions, grant appropriate level of authority to the program manager and promote better business decisions. Similarly, the risks could be placed into three broad categories. The risk categories include increased abuse in the system, enormous training/experience requirements and some problems with supervisory roles within the organization.

Program Manager Responses. Both respondents believed that the program manager's position in the program would increase in importance. One respondent noted the shift would lessen the bureaucracy resulting in greater acquisition speed and

efficiency. The other noted that it "puts legal authority in the hands of the individual responsible for the acquisition strategy." Although one comment of potential authority abuse was made by a group member the general focus of both members was on the potentially enormous amount of expertise that would be required. A negative program impact would be that the program manager's new focus would possibly detract from other key program manager roles. The members supporting this belief did not provide specific examples.

Contracting Officer Responses. Both respondents, surprisingly, noted that the benefits could lead to a more efficient acquisition process: "streamlined acquisitions, reduced contract lead time and better teaming since program managers typically get to know contractors on a more personal basis" and "faster [contract] action, fewer people to go through." One member also stated that the increase in authority, hence giving the program manager full program authority, would remove the program manager's ability to lay blame anywhere else. This is a noteworthy comment since reports have alluded to the fact that problems in the DoD acquisition process, in part, arise from the lack of accountability. The lack of accountability forms from both the disparity in the authority and frequent changes of leadership due to Permanent Change of Station.

In regards to the risks of combining the roles, both contracting members agreed that it may create too powerful of an individual and groupthink will result. One member noted that the learning curve for the program manager would be too great and would result in a lackluster return on the investment of the program manager's training.

Defense Industry Manager Responses. The sole industry respondent in this cycle noted, similar to government program managers, that the acquisition process would

be streamlined. The member also stated the increase in authority would benefit the process: "the program manager can now fully implement the decisions that they decide." The industry member added that the risk to the program is also greatly increased by combining the roles: "The learning curve the program manager would have to undergo to fully understand the issues with holding a warrant would be both cumbersome and lengthy." This lengthy process was thought to be a distracter from the primary duties of a program manager, which was noted as, "program execution" by the respondent.

Question 2. The contracting manager has replaced the program manager as the project lead, still holding warrant authority. Are the benefits and risks to such an action similar to your answers above? Or do differences exist between them?

All of the respondents believed that the benefits of making the contracting officer, over the program manager, the lead were no different than provided for Question 1. Two respondents, a program manager and a contracting officer, believed that the contracting officer has more of a business background and it would be difficult to address the technical portions of the program. The industry respondent noted that no matter what, the government program would not be able to handle the switch: "There are enough differences in the job responsibilities between a program manager and contracting officer that consolidating those functions into a single position will tend to put the success of the program in jeopardy."

One contracting respondent stated that, without a doubt, a contracting officer is better suited to take over as the program lead:

> It is more beneficial and a bigger return on investment to broaden or convert a contracting officer with warrant authority into a program manager. Most contracting officers have a boatloads of stove-piped contracting experience and very versatile acquisition experience. Most contracting officers can step into a program manager job and do it blindly due to years of managing cost, schedule, and performance.

This same individual stated that a program manager would have unguarded power and authority in decision making that would lead to a "flagrant abuse" of the budget. However, when asked to provide the potential risks of having a contracting officer hold the same high level of authority, they noted that the risk involved was "none."

Summary

This chapter provided a presentation and discussion of the qualitative input gathered for this study. The following chapter will provide the researcher's conclusions and findings with respect to the research objectives stated in Chapter I, based on the information presented in this chapter.

V. Conclusions and Recommendations

Overview

This chapter presents the researcher's conclusions and recommendations drawn from the findings in the previous chapter. Also, presented in this chapter are suggestions for further research for this topic. The foundation for the conclusions are based on the literature review performed on the conflict and authority disparity present in relationships among defense acquisition professionals as well as the data provided in Chapter IV. This study was conducted in an attempt to identify disagreements among acquisition professionals in regards to their role and authority. It also attempted to address the benefits and risks of shifting contracting authority to the program manager. This shift in authority would potentially provide an organizational and authority structure more in line with that of commercial counterparts. The chapter concludes with a list of possibilities for future research.

Conclusions

A total of four cycles were completed. Participation rates steadily decreased as the study progressed. Participation rates were 100, 80, 70 and finally 50 percent in relative order to the four cycles. Fortunately, throughout the study, even as participation shrank, the overall mix of the group remained balanced and remained within the window of group size for standard Delphi studies.

Research Objective 1. The first research objective was to identify the critical roles that a program manager is responsible for within a program office. For such a complexly nebulous job, such as the program manager's, the ten respondents settled on 11 critical roles that the program manager performs. Group members' responses were duplicated for three of the roles. The most significant finding in this area was that the real roles of a program manager are difficult to put into a list. The range of experience on the panel members' behalf provided subtle twists to the primary responsibility of a program manager which, is to provide a mission essential good or service. It was good to see that some of the responses were duplicated. This provided a small piece of evidence to what the main perceptions of the roles are. In summary, the responses that were duplicated identified the program manager as responsible for cost, schedule, performance, budget and coordination of the functional support activities. This appears to be a large set of responsibilities and as was noted in Chapter II, a high level of responsibility should be commensurate with an equally high level of authority. No matter the principle that supports it, a program manager without the authority to more directly control the contract is in direct conflict with the authority principles clearly identified in Chapter II.

Research Objective 2. The second research objective was to identify the critical roles that a contracting officer is responsible for within a program office. Unlike the program manager, the contracting officers duties were a bit more specific and could more easily be listed. The contracting officer's roles were numbered at 10 with two of them getting duplicative responses. The most significant finding in this area was the concept

that the contracting officer should become more of a business advisor to the program manager. In Cycle 1, six of the ten respondents, including two of the three contracting members, stated that given the parameters of cost, schedule, performance and budget the contracting officer should develop potential approaches and advise the program manager of the best choice. Articles in Contract Management, as recent as December and August of 2000, confirm this. Those articles hint towards the evolution of the contracting officer role in acquisitions to become more team oriented with the program manager. The researcher found this potential evolution to be of significant interest. If the contracting officer becomes more influential in the program, that event may signal a fundamental shift in acquisition practices. The contracting officer could eventually evolve into the program lead. If this occurs, the program manager could then become the program advocate with task management responsibilities. This could be a reality for the DoD if current trends continue.

Research Objective 3. The third research objective was to identify any overlap of roles that currently exist between the program manager and the contracting officer. In the first cycle, six of the ten respondents admitted to some role overlap. Interestingly, the majority (5 of 6) of respondents noting overlap were government and industry program managers. Furthermore, in Cycle 3, five respondents provided personal experiences in which explicit overlap had occurred. Two significant findings were made in this area. The first was that, in response to why overlaps occur, all three contracting officers stated that it was due to the lack of expertise and training of their program managers. This is quite profound considering the level of responsibility vested in a program manager. This

portion of the discussion led the researcher to wonder what would cause such a unanimous perception of program manager incompetency. An interesting thought arose. The DoD has incentives that come in direct conflict with its goals. Programs can take years, even decades, to establish and operate. Unfortunately, the military does not favor managers that remain in a single program or station for more than three to four years. This combined with a reduction in personnel over the years could provide a source for the perceived incompetencies. Furthermore, Program managers are not provided sufficient incentives to remain on the program no matter how well they perform. This weakens the program continuity and reduces the amount of corporate knowledge available. A General Accounting Office report stated the following:

> Acquisition reforms have had limited effectiveness because they have not changed the basic incentives or pressures that drive the behavior of the participants in the process. Reforms have also suffered because of acquisition executives' limited ability to effect cultural changes. (GAO, 1990: 57)

The second significant finding was for the program manager that was committing the overlap. The member found it to be successful enough to repeat the practice within his/her program. That respondent stated that they had been the one giving the contractor direction throughout the progress of the program and only following it up with contracting if the change was perceived to be too large to handle alone. Of course, this action, as described, is illegal in regards to federal acquisition regulations. The situation was of interest because, despite the issue of legality, the member made it appear as though the process was working. This is an example of how the formal roles of a program manager and a contracting officer were translated into practical responsibilities by the program manager. Although only one program manager responded with this

example of responsibility transformation, it is the researcher's conclusion that this could be a window to some good ideas on how to make the acquisition process more efficient. A difficulty lies in extracting the information from program managers because they may fear retribution or reprimand for their activities.

Research Objective 4. The fourth research objective was to identify the consequences of combing the roles into one position. It was interesting to note that every member across all three groups identified significant benefits to providing the program manager with a warrant. Conversely, the members, across all groups, also identified potential hindrances to issuing obligation authority to a program manager. This was considered good because it demonstrated the ability of all the members to be somewhat objective in their analysis. One of the significant findings in this area was five of the seven benefits identified an increase in program manager authority would result in better accountability and a more efficient acquisition process. Contracting officers, program managers and industry managers alike noted that the unification of the authorities would streamline the process and promote better business decisions throughout the program. The counter to this, however, was another significant finding in the study. The risks of combining the roles were easily placed into one of two categories, abuse or return on investment. Flagrant abuse of budget and procurement authority was a primary concern for all of the contracting officers and some of the industry managers. The majority of program managers identified concerns other than abuse, they worried about the amount of education and experience that would be necessary to hold both positions. The concern

focused on the military service not getting a high enough pay-off from a warranted program manager.

The benefits of promoting a contracting officer to the program manager role were no different from those posed for a program manager. The interesting finding in this area was that the risks of promoting the contracting officer to the program lead were different than warranting a program manager. The contracting officer was singled out for not having a mission-oriented mindset. The risk was that a contracting officer has too much business training and not enough missions training. A separate risk noted was that the contracting officer does not typically hold a technical background; hence, they will not understand the technology being developed. These findings beg the question of how much mission training does a program manager receive and where are they getting that mission training from, that a contracting officer cannot receive or possess? Moreover, is it even important? No conclusion was made as to the proper level of technical expertise a contracting officer should have; however, the program manager's background is typically not business oriented. So is on the job training an important factor for program managers or is the possession of a technical background all that more insightful and necessary for managing large scale programs?

Limitations

As with any exchange of ideas, a limitation exists in the interpretation of the exchange. Since the information was gathered by utilizing the Delphi method over electronic mail, the subjects perceived each question with their own biases and perspectives. The researcher tried to ensure the questions were clear and definitions were provided when necessary; however, the opportunity for misunderstanding remained.

Additionally, this research was performed under specific time constraints. The lack of time contributed to good discussions being truncated in order to progress to the next cycle.

Furthermore, the participation levels dropped as the study progressed. As addressed in this report, the time constraints present in the schedule of acquisition professionals is significant. The researcher would like to believe that the dwindled participation was due to the subjects' work requirements rather than disinterest in the subject matter for the study. Future research attempted, either on this topic or with a Delphi, should be careful to identify participants that have ample time to contribute and pledge to stick it out. This is important because the Delphi technique is optimized in small groups, but not in *really* small groups.

Conclusions made in regards to the applicability of the findings are limited. They were limited due to the wide range of experience of the expert participants. No specific ACAT level of experience was required of the program managers in order to participate. The contracting officers were, however, all Level III certified. The scope was not limited to any particular industry, ACAT level or contracting certification level. Although the scope was broad in determining participant qualifications, this initial study may provide insight to wider applications for later studies. The validity of those later studies would require further and more specific research.

Recommendations for Further Research

This study accomplished its goal of identifying and discussing pertinent issues to in regards to the research objectives. Due to time constraints the study was closed with many more questions and issues to address with the panel. The data gathered was

qualitative and it would be interesting to perform an alternative study that could address similar issues but with quantitative methods. The results from this study posed four specific areas that would be interesting to study further. The first is to investigate the future role of contracting officer as a business advisor. Whether qualitative or quantitative, the perceptions of whether that new role brings with it more or less authority within a program would be of great interest to the acquisition community. The second area would be to investigate industry operations more. Industry members provided good insight into their perceptions of government contracting in this study. If the government's trends and policies continue to reach for streamlining and commercial practices, then a deeper analysis of how industry acquisition managers' relationships are organized would be of great interest to the Department of Defense.

The third area of interest for further study would be an attempt to dollarize the benefits and risks of combining the roles of a program manager and a contracting officer. Dollarization would attach an approximate dollar value to each benefit and risk. This would allow for a more objective look into the choices available for acquisition leaders.

The fourth area of interest would be to spend some time investigating the requirements that would be necessary for a single individual to possess and operate with both program and warrant authority. Perhaps this could tie in with the investigation of industry practices mentioned above.

Summary

The Air Force is continually looking to not only do more with less, but also do so with unprecedented efficiency. If the Air Force and the Defense Department continue their quest to mirror commercial counterparts in regards to acquisition procedures, then

reforms will need to be made both in philosophy and in organizational structure. This study reported that certain levels of confusion of role and authority exist between program managers and contracting officers. This conflict has been present as early as the NAVSEA report in 1983. Authority principles and industry examples lead one to believe that the government's authority assignments are complex, cumbersome and perhaps even inappropriate. A sense of protecting the public dollar currently guides most of the check and balance systems operating in the acquisition environment today. If the Defense Department decides that contract agent authority is a vital check and balance, then they must be aware of the costs it may potentially be costing them. The price of a "secure" spending system is a great potential for program manager/contracting officer conflict, program inefficiency, mixed communications with contractors and a continued lack of buy-in from acquisition professionals.

Appendix: Delphi Cycles 1-4

Delphi Cycle 1

Background Information
Congress desires to continue to the overhaul the acquisition process (DSMC TR3-94). They view the current system as overly bureaucratic and heavily regulated. They are interested in reducing some of the checks and balances that currently exist. One option is to grant the Program Manager contract authority. The goal of this research is to look at the plausibility of doing this and identify the positive and negative outcomes. Before we identify those outcomes, we need to clearly define what it means to give a PM contract authority. Starting with this cycle, we will explore the roles and responsibilities of both Program and Contract Managers.

Definitions
Contracting Officer:
The Contracting Officer is responsible for ensuring performance of all necessary actions for effective contracting, ensuring compliance with the terms of the contract, and safeguarding the interests of the United States in its contractual relationships. In order to perform these responsibilities, Contracting Officers should be allowed wide latitude to exercise business judgement. (FAR 1.602-2)

Program Manager:
A Program [Manager] is an acquisition official directly and continuously charged with coordinating and managing all phases of a program. The Program [Manager] intensely integrates diverse functional activities on a timely and systematic basis to achieve a coordinated concentration of resources on the objectives of a specified broad task. (Thybony, 1987:70-71)

**********Questions**********

1. What are the critical roles that the PM performs for a program?

2. What are the critical roles that the CM performs for a program?

3. Do their roles overlap? Clearly identify what roles are overlapped.

Delphi Cycle 2

Instructions for this cycle:

The purpose of this cycle is to report all of the ideas sent in response to the first cycle and to solicit new ideas for dealing with the issues:

1. What are the critical roles that the PM performs for a program?
2. What are the critical roles that the CM performs for a program?
3. Do their roles overlap? Clearly identify what roles are overlapped.

Please refine ideas already received by clarifying them where desired. Please indicate whether or not your group has adequately captured the roles of a PM and a CM and any potential overlap. Please identify which, if any, ideas presented should or should not be included. Also, identify any other content that you feel is missing.

****

Critical Roles of the PM: *(the number in parenthesis represents duplicate responses)*

[Responses listed in Chapter IV]

****

Critical Roles of the CM: *(the number in parenthesis represents duplicate responses)*

[Responses listed in Chapter IV]

****

Do they overlap?

[Responses listed in Chapter IV]

Delphi Cycle 3

Instructions for this cycle:

The purpose of this cycle is to have acquisition professionals relate their experiences dealing with the issues:

1. In your experiences as a (PM/CM—whichever you may be), what functions (i.e. day-to-day responsibilities) have you performed that would typically be defined as the others (PM or CM) role?

2. What events led you to take on that responsibility? Characterize the situation.

Reflect on even the smallest of tasks such as preparing contract documents or discussions with the contractor. Remember that your comments are anonymous.

****

Delphi Cycle 4

Instructions for this cycle:

The purpose of this cycle is to gather your professional opinion on the potential for change in the acquisition field. For the purposes of this cycle, assume that any existing regulations, directives and statements of law do not apply. This cycle is designed to allow you, the expert, to present ideas without the paradigm of the current process to hinder you.

**********Issue**********

The Program Manager has been issued a warrant. Identify both the *benefits* and the *risks* of such an action.

The Contract Manager has replaced the Program manager as the project lead, still holding warrant authority. Are the benefits and risks to such an action similar to your answers above? Or do differences exist between them?

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Vita

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14. ABSTRACT

The purpose of this research was to identify current disagreement among acquisition professionals in regards to their role and authority; and to identify benefits and risks associated with combining program management and contracting officer roles into a single position. The research questions were answered through a literature review and use of the Delphi technique. The literature review indicated that the DoD has been operating with multiple conflicting perceptions of authority among its key acquisition professionals. The literature also identified the need for complex organizations, such as DoD acquisition offices, to pair high levels of responsibility with equally high levels of authority. Ten program manager and contracting experts, representing the Air Force and industry, participated in four cycles of the Delphi technique. The research identified critical overlaps in perceptions of the roles and authority between a program manager and a contracting officer. The program manager was noted as having a lack of sufficient authority to guide the program. The contracting officer's roles were noted as shifting towards that of a business advisor. The culmination of this research effort was a discussion and presentation of recommendations for the future of the relationship.

15. SUBJECT TERMS

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